Curriculum vitae

Dr. Reshma Sinha
Assistant professor
Department of Animal Sciences
Central university of Himachal Pradesh

Personal Details

Address: *Department of Animal Sciences, School of Life Sciences,*
Central University of Himachal Pradesh, India
Telephone: .....
E-mail: sinhareshma89@hpcu.ac.in
Citizenship India

Professional Qualifications

ORCID id: 0000-0003-4625-7664
Google Scholar: https://scholar.google.co.in/citations?hl=en&user=jS00tewAAAAJ&view_op=list_works&sortby=pubdate
Research Gate: https://www.researchgate.net/profile/Reshma-Sinha

Employment History

- Served as Assistant Professor in Maharaja Agrasen University, Baddi, Himachal Pradesh, India.
- Served as Assistant Professor in Shoolini University, Solan, Himachal Pradesh, India

Personal Distinctions

- CSIR- JRF with AI rank – 106
- Serving as Editorial Board Member of the journal 'Environmental Toxicology and Chemistry', Oxford Academic Press.
- Member of International Societies of Toxicology- SETAC and SOT.
- Two articles published in Science of Total environment (IF-8.2).

Invited Seminars and Invited Conference Presentations (last 5 years)

- Delivered a talk on 'Electron Microscopy' on 30th August, 2025 at CSK HP KV, Palampur.
- Delivered a lecture on 'An Insight on Forensic entomology' on 6 March 2023 in Dev Samaj College, Ferozepur, Punjab
- Delivered a Talk on 'Intellectual Property Rights in Animals Studies' on 22 Nov 2023 in 2 Days National seminar on 'Current Challenges on Intellectual Property Rights' organized by Career Point University, Hamirpur, India.

Professional Contributions (last 5 years)

- Editorial Board Member, Environmental Toxicology and Chemistry', Oxford Academic Press.

Teaching

PG: Developmental Biology, Molecular Genetics, Advanced Molecular Biology, Cell Biology, Biostatistics, Animal Physiology, Review of Literature, Ecology

PhD: Advanced Research tools and Techniques, Cell and molecular biology.

Doctoral Thesis Supervision

In Progress (3 students)

- Deepa (CSIR - JRF)
- Naveeta (CSIR - JRF)
- Yogita (UGC - JRF)

University Administration

- Academic In-charge, Department of Animal Sciences, CUHP since September 2023
- Certificate Course Coordinator, Department of Animal Sciences, CUHP since November, 2022
- SPARSH Shahpur Committee Member
- DRC member of CCBB
- D.Sc. member of Animal Sciences
- NIRF Department coordinator

Publications

Journal Articles

- Banaee, M., Sharma, D., Sinha, R. *et al.* (2025). Herbal remedies in aquaculture: efficacy, risks, and the need for quality assurance. *Aquacult Int* **33**, 492. https://doi.org/10.1007/s10499-025-02120-7.
- Thakur, Y., Jindal, R., Sinha, R. (2025). Microplastics Abundance in Aquatic Environment and its Impact on Macrobenthos. Aquatic Sciences, 87 (4): 82. https://doi.org/10.1007/s00027-025-01205-y
- Kotia, N., Sinha, R., Aliko, V., Faggio, C. (2025). Benzophenone-3: A systematic review on aquatic toxicity, pollution status, environmental risk assessment, and treatment approaches Science of The Total Environment, 985: 179740. https://doi.org/10.1016/j.scitotenv.2025.179740
- Kumar, A., Thakur, Y., Sinha, R. (2025). Physiological impact of secondary nanoplastics on aquatic inhabitants in special reference to immunotoxicity. Environmental Monitoring and Assessment, 197(2): 209. https://doi.org/10.1007/s10661-025-13645-y
- Adel, M., Sakhaie, F., Grover, A., Sinha, R., Shekarabi, S.P.H., Moradishirazi, D., Faggio, C. (2025). Relationship between heavy metals in farmed freshwater prawn

(*Macrobrachium rosenbergii*) and human health risk assessment in water body: a case in Qasr-e Shirin in Kermanshah, Iran. Journal of Food Composition and Analysis, 140: 107205. https://doi.org/10.1016/j.jfca.2025.107205

- Vijayaram, S., Sinha, R., Faggio, C., Ringø, E., Chou, C.C. (2024). Biopolymer encapsulation for improved probiotic delivery: Advancements and challenges. AIMS Microbiol. 15;10(4):986-1023. doi: 10.3934/microbiol.2024043.
- Gholamhosseini, A., Banaee, M., **Sinha, R.,** A. Zeidi, C. Faggio (2024). Bio-concentration of heavy metals in marine crustaceans' hemolymph: insights from Oman Sea, Iran. International Journal of Environmental Science and Technology. 22: 4321-4334. Doi: https://doi.org/10.1007/s13762-024-05931-y
- Jyoti, D., **Sinha, R.** (2023). Physiological impact of personal care product constituents on non-target aquatic organisms. Science of the Total Environment 905: 167229. https://doi.org/10.1016/j.scitotenv.2023.167229
- Banaee, M., Zeidi, A., **Sinha, R.**, Faggio, C. (2023). Individual and Combined Toxic Effects of Nano-ZnO and Polyethylene Microplastics on Mosquito Fish (*Gambusia holbrooki*). Water 2023, 15(9), 1660; https://doi.org/10.3390/w15091660
- Thakur, Y., Grover, A., & **Sinha, R.** (2023). Differential distribution of macroinvertebrate associated with water quality. World Water Policy, 9(1): 84–112. https://doi.org/10.1002/wwp2.12089
- Grover, A., Sharma, P., Sharma, R., & **Sinha, R.** (2022). Ultrastructural and molecular approach as a tool for taxonomic identification of aquatic macroinvertebrates: A review. Heliyon, 8 (12), e12236.Doi: https://doi.org/10.1016/j.heliyon.2022.e12236 .
- Grover, A., Kalia, P., **Sinha, R.,** & Garg, P. (2022). Colony collapse disorder: A peril to apiculture. Journal of Applied and Natural Science, 14(3), 729-739.DOI: https://doi.org/10.31018/jans.v14i3.3502
- Jyoti, D., **Sinha, R.,** & Faggio, C. (2022). Advances in biological methods for the sequestration of heavy metals from water bodies: a review. Environmental Toxicology and Pharmacology, 94; 103927. https://doi.org/10.1016/j.etap.2022.103927
- Gudeta, K., Bhagat, A., Julka, J.M., **Sinha, R.,** Verma, R., Kumar, A., Kumari, S., Ameen, F., Bhat, S.A., Amarowicz, R., & Sharma, M. (2022). Vermicompost and Its Derivatives against Phytopathogenic Fungi in the Soil: A Review. Horticulturae 8, 311. https://doi.org/10.3390/horticulturae8040311
- **Sinha, R.,** & Jindal, R. (2022). Oxidative Stress and Toxico-Pathic Branchial Lesions in *Cyprinus carpio* Exposed to Malachite Green. Bulletin of Environmental Contamination and Toxicology, 108, 571–578. 10.1007/s00128-021-03415-0.
- Hoseini, S. M., **Sinha, R.,** Fazel, A., Khosraviani, K., Delavar, F. H., Arghideh, M., Sedaghat, M., Paolucci, M., Hoseinifar, S. H., & Van Doan, H. (2022). Histopathological damage and stress- and immune-related genes' expression in the intestine of common carp, Cyprinus carpio exposed to copper and polyvinyl chloride microparticle. Journal of Experimental Zoology, 337, 181– 190. https://doi.org/10.1002/jez.2555.
- Grover, A., **Sinha, R.,** Jyoti, D., & Faggio, C. (2022). Imperative role of electron microscopy in toxicity assessment: A review. Microscopy research and technique, 85(5): 1976-1989. Doi: https://doi.org/10.1002/jemt.24029
- **Sinha R.,** Jindal R. & Faggio C. (2021). Protective Effect of *Emblica officinalis* in *Cyprinus carpio* against Hepatotoxicity Induced by Malachite Green:

Ultrastructural and Molecular Analysis. Applied Sciences, 11(8): 3507. DOI: https://doi.org/10.3390/app11083507.

- **Sinha, R.,** Jindal, R. & Faggio, C. (2021). Nephroprotective effect of *Emblica officinalis* fruit extract against malachite green toxicity in piscine model: Ultrastructure and oxidative stress study. Microscopy and Research Technique, 84 (4): 1911-1919. Doi: https://doi.org/10.1002/jemt.23747
- **Sinha, R.** & Bhinder, P. (2021). Malathion prompted genotoxicity assessment in rDNA ITS1 and ITS 2 sequence of *Anopheles stephensi*. International Research Journal of Science and Technology, 2(2):406-412. https://irjst.com/wp-content/uploads/Volume%202%20:%20Issue%202/IRJST222106.pdf
- **Sinha, R.** & Jindal, R. (2020). Elucidation of malachite green induced behavioural, biochemical, and histo-architectural defects in *Cyprinus carpio* as piscine model. Environmental and Sustainability Indicators, 8: 100055. DOI: https://doi.org/10.1016/j.indic.2020.100055.
- **Sinha, R.** & Jindal, R. (2019). Augmenting fish health using *Emblica officinalis* against triarylmethane induced blood toxicity in *Cyprinus carpio*. Aquaculture Research, 50 (6): 1644-1650. https://doi.org/10.1111/are.14044
- Jindal, R. & **Sinha, R.** (2019). Malachite green induced ultrastructural corneal lesions in *Cyprinus carpio* and its amelioration using *Emblica officinalis*. Bulletin of Environmental Contamination and Toxicology, 102(3): 377-384. DOI: https://link.springer.com/article/10.1007/s00128-019-02549-6.
- Jindal, R., **Sinha, R.** & Brar, P. (2019). Evaluating the protective efficacy of *Silybum marianum* against deltamethrin induced hepatotoxicity in piscine model. Environmental Toxicology and Pharmacology, 66: 62-68. DOI: https://doi.org/10.1016/j.etap.2018.12.014

Book Chapters

1. Sharma R., Sinha R., Kaur R., Rani S. (2022) Drug-Induced Nephrotoxicity and Use of Biomarkers. In: Patel V.B., Preedy V.R., Rajendram R. (eds) Biomarkers in Toxicology. Biomarkers in Disease: Methods, Discoveries and Applications. Springer, Cham. https://doi.org/10.1007/978-3-030-87225-0_50-1
2. Kushal Thakur, Dixit Sharma, Disha Chauhan, Danish Mahajan, Kanika Choudhary, Bhavna Brar, Amit Kumar Sharma, Reshma Sinha, Ranjit Kumar, Sunil Kumar and Rakesh Kumar (2023). A Systems Biology Approach in Fisheries Science. In: An upam Nath Jha, Sandeep Swargam & Indu Kumari (Eds) Systems Biology, Bioinformatics and Livestock Science. Bentham Science. 10.2174/9789815165616123010009
3. Disease Management and Prophylaxis by Immunostimulants (2023). Paulraj Balaji Chinnathambi Pothiraj, Divya Jyoti, Subramanian Ramya, Ramaraj Jayakumararaj, Aseem Grover, Reshma Sinha, Palanichamy Ayyappan, Caterina Faggio. In: Immunomodulators in Aquaculture and Fish Health. CRC press. 10.1201/9781003361183-9

4. Kotia, N., Sharma, D., Sinha, R., Rani, S. (2024). Faunal Diversity and Sustainable Development. In: Sobti, R.C. (eds) Role of Science and Technology for Sustainable Future. Springer, Singapore. https://doi.org/10.1007/978-981-97-0710-2_14
5. Sharma, R., Thakur, Y., Sinha, R., Kalia, P. (2024). Wasps as Nature's Pollinators-A Closer Look at Their Ecological Contributions. In: INSECT POLLINATORS DIVERSITY. Bharti Publications.